This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-5 (cancelled).

Claim 6 (currently amended). The process according to claim 21 wherein the highly transmittive glasses are Flint glass types with an Abbe coefficient of $v[d]_d \leq 50$.

Claim 7 (previously presented). The process according to claim 21 wherein feeding in of the highly pure glass raw materials occurs either in portions or continuously.

Claim 8 (previously presented). The process according to claim 21 wherein the temperature in the melt lies in the range of 1100° to 1380°C.

Claim 9 (cancelled).

Claim 10 (previously presented). The process according to claim 21 wherein agitation of the melt comprises stirring at a rotation rate in the range of 30 to 100 rpm.

Claims 11-13 (cancelled).

Claim 14 (previously presented). The process according to claim 6, wherein feeding-in of the highly pure glass raw materials occurs either in portions or continuously.

Claim 15 (previously presented). The process according to claim 6, wherein the temperature in the melt lies in the range of 1100° to 1380°C.

Claim 16 (previously presented). The process according to claim 7, wherein the temperature in the melt lies in the range of 1100° to 1380°C.

Claims 17-19 (cancelled).

Claim 20 (previously presented). The process according to claim 6, wherein agitation of the melt comprises stirring at a rotation rate in the range of 30 to 100 rpm.

Claim 21 (previously presented). A process for the production of glasses highly transmittive in the UV range by means of a melting process carried out in a melt tank in which there is a glass melt having a melt surface, comprising:

steadily feeding a well-homogenized mixture of highly pure glass raw materials of the highly transmittive glasses to be melted through a feed opening of the melt tank in such a manner that a closed mixture cover arises on the melt surface; supplying energy to the glass melt only below the melt surface without supplying energy to the melt surface or the space above the melt surface; and agitating the melt;

wherein material from the mixture resting on the melt surface is uniformally intermixed and sub-mixed into the melt, and wherein the space above the melt has a temperature in the range of 500°C to 700°C.

Claim 22 (previously presented). The process according to claim 21 wherein the temperature in the melt lies in the range of 1280°C to 1380°C.

Claim 23 (currently amended). A glass for r-LCD lens systems, glass fibers and fiber reinforcers produced by a process wherein a melting process is carried out in a melt tank in which there is a glass melt having a melt surface, said process comprising:

steadily feeding a well-homogenized mixture of highly pure glass raw materials of the highly transmittive glasses to be melted through a feed opening of the melt tank in such a manner that a closed mixture cover arises on the melt surface; supplying energy to the glass melt only below the melt surface without supplying energy to the melt surface or the space above the melt surface; and agitating the melt;

wherein material from the mixture resting on the melt surface is uniformally intermixed and sub-mixed into the melt, and wherein the space above the melt has a temperature in the range of 500ºC to 700ºC.

Claim 24 (previously presented). A process for the production of glasses highly transmittive in the UV range by means of a melting process carried out in a melt tank in which there is a glass melt having a melt surface, comprising:

steadily feeding a well-homogenized mixture of highly pure glass raw materials of the highly transmittive glasses to be melted through a feed opening of the melt tank in such a manner that a closed mixture cover arises on the melt surface; supplying energy to the glass melt only below the melt surface without supplying energy to the melt surface or the space above the melt surface; and agitating the melt;

wherein material from the mixture resting on the melt surface is uniformally intermixed and sub-mixed into the melt.

Claim 25 (previously presented). The process according to claim 24 wherein the temperature in the melt lies in the range of 1280°C to 1380°C.

Claim 26 (currently amended). The process according to claim 24 wherein the highly transmittive glasses are Flint glass types with an Abbe coefficient of $v[d]_d \leq 50$.

Claim 27 (previously presented). The process according to claim 24 wherein feeding in of the highly pure glass raw materials occurs either in portions or continuously.

Claim 28 (previously presented). The process according to claim 24 wherein the temperature in the melt lies in the range of 1100°C to 1380°C.

Claim 29 (previously presented). The process according to claim 24 wherein agitation of the melt comprises stirring at a rotation rate in the range of 30 to 100 rpm.

Claim 30 (previously presented). The process according to claim 26, wherein feeding-in of the highly pure glass raw materials occurs either in portions or continuously.

Claim 31 (previously presented). The process according to claim 26, wherein the temperature in the melt lies in the range of 1100°C to 1380°C.

Claim 32 (previously presented). The process according to claim 27, wherein the temperature in the melt lies in the range of 1100°C to 1380°C.

Claim 33 (previously presented). The process according to claim 26, wherein agitation of the melt comprises stirring at a rotation rate in the range of 30 to 100 rpm.

Claim 34 (previously presented). A glass for r-LCD lens systems, glass fibers and fiber reinforcers produced by a process wherein a melting process is carried out in a melt tank in which there is a glass melt having a melt surface, said process comprising:

steadily feeding a well-homogenized mixture of highly pure glass raw materials of the highly transmittive glasses to be melted through a feed opening of the melt tank in such a manner that a closed mixture cover arises on the melt surface; supplying energy to the glass melt only below the melt surface without supplying energy to the melt surface or the space above the melt surface; and agitating the melt.